

EDUCATION**Massachusetts Institute of Technology – Cambridge, MA****M.S. in Technology and Policy****June 2003 – June 2005**

Thesis: “Opportunities for Technological and Economic Development Policy in Brazil”

Relevant courses include:

- Economic Development and Technological Capabilities
- System Dynamics at MIT Sloan
- Economics for Business Decisions
- Law, Technology, and Public Policy

M.Eng. in Materials Science and Engineering**June 2002 – June 2003**

Thesis: “Process Modifications for Improved Optical Characteristics of K-Type Polarizer”

Relevant courses include:

- Materials Selection, Design, and Economics
- Industry, Technology, and Ecology

B.S. in Chemical Engineering**September 1998 – June 2002**

Relevant courses include:

- Industrial Ecology
- Developmental Entrepreneurship
- Environmentally Benign Manufacturing
- Drug Development in Practice

EXPERIENCE**MIT Edgerton Center: International Development Initiative, *Instructor*****July 2005 – present**

- Perform research into best practices of technology dissemination in developing countries.
- Lead MIT projects in Brazil, including technical work and long-term partnerships.
- Project leader for technical communications exchange at Cape Peninsula University of Technology, South Africa.
- Co-develop and co-teach course on technology dissemination in developing countries.

MIT: Sustainable Energy: Choosing Among Options, *Teaching Assistant***January 2005 – June 2005**

- Taught graduate students the basics of energy production and analysis, emphasizing the importance of technology evaluation and appropriateness.

MIT: Lab for Manufacturing and Productivity, *Research Associate***September 2003 – January 2005**

- Performed analysis of environmental impact of manufacturing processes, emphasizing energy and material flows.
- Consulted on decision-making related to sustainability and environmental factors in design and manufacturing.

3M Optical Systems Division, Norwood, MA, *Research Intern***May – September 2001; January – May 2003**

- Worked closely with process engineers to improve characteristics of high-end polarizers.
- Explored dichroic dyes in polarizers, making significant steps to include this technology in new products.

MIT: Media Lab, *Undergraduate Researcher***September 2000 – June 2002**

- Designed process for creation of porous silicon nanoparticles using ideal anodization.

MIT: Department of Chemical Engineering, *Undergraduate Researcher***September 1999 – June 2000**

- Designed, fabricated, and tested microreactors using microfabrication and sol-gel techniques with a short term goal of integrating synthesis and detection on the same chip.

LANGUAGES

Native English speaker. Fluent in Portuguese, French, and Spanish. Basic Japanese, Vietnamese, Mandarin.

CONFERENCES AND PUBLICATIONS

- Moderator, “Students’ Challenge in Sustainability Education,” Integrated Research System for Sustainability Science-Asian Institute of Technology Joint Symposium on Sustainability Science, 2006, Thailand.
- Moderator, “Communication for Sustainability,” Meeting of the Alliance for Global Sustainability, 2006, Thailand.
- Panelist, “Social Entrepreneurship,” MIT \$50K Global Startup Workshop, 2005, United Arab Emirates.
- MIT Representative, University of Tokyo –AIT Intensive Program on Sustainability, Thailand, 2005.
- Co-author, “Environmental Analysis of Manufacturing Processes,” 2005 NSF DMII.
- Lead author, “Life Cycle Analysis of Conventional Manufacturing Techniques: Sand Casting,” ASME 2004.
- Co-author, “Origins of Anomalous Micellization in Diblock Copolymer Solutions,” *Langmuir*.

ADDITIONAL ACHIEVEMENTS

- 2003 Ideas that Matter grant recipient for social norms marketing in MIT community.
- MIT \$1K Entrepreneurship Competition winning business proposal team, Dlo Pròp, 2001.
- Shell Gourami Business Challenge, Spain; multidisciplinary business simulation, 2001.
- Recipient of the 2001 3M Scholars Scholarship.